

EXPRESS MAIL NO. EV336617800US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Ronald Berenson  
Application No. : 09/864,930  
Filed : May 24, 2001  
For : METHODS FOR RESTORING OR ENHANCING T-CELL  
IMMUNE SURVEILLANCE FOLLOWING NATURALLY OR  
ARTIFICIALLY INDUCED IMMUNOSUPPRESSION

Examiner : G.R. Ewoldt, Ph.D.  
Art Unit : 1644  
Docket No. : 980034.415  
Date : February 10, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents:

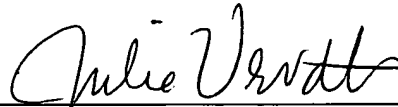
In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the U.S. Patent and Trademark Office the references set forth on the attached Form PTO-1449 (copies of the cited references are enclosed). As to any reference supplied, applicant does not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserves the right to traverse or antedate any such reference, as by a showing under 37 C.F.R. § 1.131 or other method. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicant's duty to disclose all information he is aware of which is believed relevant to the examination of the above-identified application, applicant believes that his invention is patentable.

Please acknowledge receipt of this Second Supplemental Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

A fee of \$180 is submitted in accordance with 37 C.F.R. § 1.97(c). The Director is authorized to charge any other fees which may be required, or credit any overpayment to Deposit Account No. 19-1090.

Respectfully submitted,

Seed Intellectual Property Law Group PLLC



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Julie A. Urvater, Ph.D., Patent Agent  
Registration No. 50,461

JAU:ljt

Enclosures:

- Postcard
- Check for \$180
- Transmittal Form
- Fee Transmittal Form (+1)
- Forms PTO-1449 (5 Sheets)
- Cited References (65)

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FORM PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
980034.415APPLICATION NO.  
09/864,930**SECOND SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT**  
(Use several sheets if necessary)APPLICANTS  
Ronald BerensonFILING DATE  
May 24, 2001GROUP ART UNIT  
1644

FEB 10 2004

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	5,190,878	03/02/93	Wilhelm	435	285	
AB	5,443,983	08/22/95	Ochoa et al.	435	240.2	
AC	5,470,730	11/28/95	Greenberg et al.	435	172.3	
AD	5,672,505	09/30/97	Jones et al.	435	283.1	
AE	5,674,704	10/07/97	Goodwin et al.	435	69.1	
AF	5,735,279	04/07/98	Klaveness et al.	128	654	
AG	5,766,944	06/16/98	Ruiz	435	325	
AH	5,804,442	09/08/98	Romet-Lemonne et al.	435	374	
AI	5,837,477	11/17/98	Germain et al.	435	7.24	
AJ	5,858,358	01/12/99	June et al.	424	130.1	

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AK	EP 633930 B1	04/26/00	EPO		
	AL	WO 97/01304	01/16/97	WIPO		
	AM	WO 97/05233	02/13/97	WIPO		
	AN	WO 97/05239	02/13/97	WIPO		
	AO	WO 00/02520	01/20/00	WIPO		X

**OTHER PRIOR ART** (Including Author, Title, Date, Pertinent Pages, Etc.)

AP	Baroja, M.L. et al., "The Anti-T Cell Monoclonal Antibody 9.3 (Anti-CD28) Provides a Helper Signal and Bypasses the Need for Accessory Cells in T Cell Activation with Immobilized Anti-CD3 and Mitogens," <i>Cellular Immunology</i> 120: 205-217, 1989.
AQ	Bergstresser, P.R. et al., "T Cell-Mediated Terminal Maturation of Dendritic Cells," in <i>Dendritic Cell in Fundamental and Clinical Immunology</i> , Ricciardi-Castagnoli (Ed.), Plenum Press, New York, 1997, pgs. 65-69.
AR	Bretscher, P., "The two-signal model of lymphocyte activation twenty-one years later," <i>Immunology Today</i> 13(2): 74-76, 1992.

EXAMINER

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\* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

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BA	5,888,807	03/30/99	Palsson et al.	435	293.2	
BB	5,942,607	08/24/99	Freeman et al.	536	23.5	
BC	5,962,319	10/05/99	Ogawa et al.	435	325	
BD	5,972,721	10/26/99	Bruno et al.	436	526	
BE	5,985,653	11/16/99	Armstrong et al.	435	303.1	
BF	6,096,532	08/01/00	Armstrong et al.	435	286.5	
BG	6,113,901	09/05/00	Bluestone	424	154.1	
BH	6,129,916	10/10/00	Chang	424	179.1	
BI	6,143,297	11/07/00	Bluestone	424	184.1	
BJ	6,184,043	02/06/01	Fodstad et al.	436	526	

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	BK	WO 00/02520	01/20/00	WIPO	X	
	BL	WO 03/024312	03/27/03	WIPO		
	BM	WO 03/025158	03/27/03	WIPO		
	BN	WO 03/034820	05/01/03	WIPO		
	BO	WO 03/043643	05/30/03	WIPO		
	BP	WO 03/077658	09/25/03	WIPO		

**OTHER ART** (Including Author, Title, Date, Pertinent Pages, Etc.)

BQ	Creson, J. et al., "The Mode and Duration of Anti-CD28 Costimulation Determine Resistance to Infection by Macrophage-Tropic Strains of Human Immunodeficiency Virus Type 1 in Vitro," <i>Journal Of Virology</i> , 73(11):9337-9347, November 1999.
BR	Groh, V. et al., "Stimulation of T cell autoreactivity by anomalous expression of NKG2D and its MIC ligands in rheumatoid arthritis," <i>Proceedings of the National Academy of Sciences</i> 100(16): 9452-9457, August 5, 2003.

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## SECOND SUPPLEMENTAL

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

## APPLICANTS

Ronald Berenson

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## GROUP ART UNIT

1644

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
CA	6,197,298	03/06/01	Chang	424	179.1	
CB	6,316,257	11/13/01	Flyer et al.	435	372.3	
CC	6,352,694	03/05/02	June et al.	424	93.71	
CD	6,355,779	03/12/02	Goodwin et al.	530	388.23	
CE	2001/0031253	10/18/01	Gruenberg	424	93.1	
CF	2002/0090362	07/11/02	Stauss	424	93.21	
CG	2002/0182730	12/05/02	Gruenberg	435	375	
CH	2003/0039650	02/27/03	Gruenberg	424	144.1	
CI	2003/0134341	07/17/03	Gruenberg	435	7.21	
CJ	2003/0134415	07/17/03	Gruenberg	435	372	
CK	2003/0170238	09/11/03	Gruenberg et al.	424	144.1	
CL	2003/0175242	09/18/03	Gruenberg	424	93.2	
CM	2003/0175272	09/18/03	Gruenberg	424	144.1	
CN	2003/0194395	10/16/03	Gruenberg et al.	424	93.7	

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
				YES	NO
CO					

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

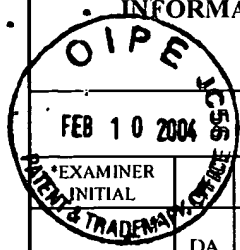
CP	Hami, L. et al., "Xcellerate™: A Platform Process for the GMP Manufacture of Activated T Cells for the Treatment of Patients with Cancer and Immune Dysfunction," in <i>Proceedings of the 42<sup>nd</sup> Annual Meeting of the American Society of Hematology</i> , San Francisco, December 1-5, 2000, vol. 96, no. 11, part 1, abstract # 3630.
CQ	Iezzi et al., "The Duration of Antigenic Stimulation Determines the Fate of Naive and Effector T Cells," <i>Immunity</i> 8: 89-95, January 1998.

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<b>SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT</b> (Use several sheets if necessary)				APPLICANTS Ronald Berenson			
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<b>U.S. PATENT DOCUMENTS</b>							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
DA							
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION			
				YES NO			
DB							
<b>OTHER PRIOR ART</b> (Including Author, Title, Date, Pertinent Pages, Etc.)							
DC		June et al., "The B7 and CD28 receptor families," <i>Immunology Today</i> 15(7): 321-331, 1994.					
DD		Kalamasz, D. et al., "Storage Shipment of Freshly Harvested or Cryopreserved Xcellerate™ Activated T Cells for Clinical Applications," in <i>Proceedings of the 42<sup>nd</sup> Annual Meeting of the American Society of Hematology</i> , San Francisco, December 1-5, 2000, vol. 96, no. 11, part 2, abstract # 5113.					
DE		Kato et al., "Gene Transfer of CD40-Ligand Induces Autologous Immune Recognition of Chronic Lymphocytic Leukemia B Cells," <i>J. Clin. Invest.</i> 101(5): 1133-1141, March 1998.					
DF		Krawczyk et al., "Cbl-b Is a Negative Regulator of Receptor Clustering and Raft Aggregation in T Cells," <i>Immunity</i> 13: 463-473, October 2000.					
DG		Lanzavecchia, A., "The Role of Dendritic Cells in the Generation of Effector and Memory T Cell Responses," from <i>The Midwinter Conference of Immunologists</i> , January 22-25, 2000, available at <a href="http://www.midwconferimmunol.org/Midwinter00/sessions/lanzavecchia.html">www.midwconferimmunol.org/Midwinter00/sessions/lanzavecchia.html</a> .					
DH		Larsson, S. et al., "Productive Cytomegalovirus (CMV) Infection Exclusively in CD13-Positive Peripheral Blood Mononuclear Cells from CMV-Infected Individuals," <i>Transplantation</i> , 65(3):411-415, February 15, 1998.					
DI		Li, Q. et al., "Expanded Tumor-reactive CD4 <sup>+</sup> T-Cell Responses to Human Cancers Induced by Secondary Anti-CD3/Anti-CD28 Activation," <i>Clinical Cancer Research</i> 5: 461-469, February 1999.					
DJ		Li, Q. et al., "Immunological Effects of BCG as an Adjuvant in Autologous Tumor Vaccines," <i>Clinical Immunology</i> 94(1): 64-72, January 2000.					
DK		Liebowitz et al., "Costimulatory approaches to adoptive immunotherapy," <i>Current Opinion in Oncology</i> 10: 533-541, 1998.					
DL		Polanski, M. et al., "Xcellerate( : A Closed, Scalable Process for the GMP Manufacture of Stable Activated T Cells," in <i>Proceedings of the 15<sup>th</sup> Annual Scientific Meeting of the Society for Biological Therapy</i> , Seattle, October 26-29, 2000, and <i>Journal of Immunotherapy</i> , (23)5:599, September 2000.					
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EA							
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION			
				YES NO			
EB							
<b>OTHER PRIOR ART</b> (Including Author, Title, Date, Pertinent Pages, Etc.)							
EC		Ranheim and Kipps, "Activated T Cells Induce Expression of B7/BB1 on Normal or Leukemic B Cells through a CD40-dependent Signal," <i>J. Exp. Med.</i> 177: 925-935, April 1993.					
ED		Ten Berge et al., "Selective Expansion of a Peripheral Blood CD8 <sup>+</sup> Memory T Cell Subset Expressing Both Granzyme B and L-Selectin During Primary Viral Infection in Renal Allograft Recipients," <i>Transplantation Proceedings</i> 30: 3975-3977, 1998.					
EE		Zou, J.-P. et al., "Tumor-Bearing Mice Exhibit A Progressive Increase in Tumor Antigen-Presenting Cell Function and A Reciprocal Decrease in Tumor Antigen-Responsive CD4 <sup>+</sup> T Cell Activity," <i>The Journal of Immunology</i> 148(2): 648-655, January 15, 1992.					
EF							
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